

OUR
20th YEAR

BADGER STATE

Smoke Signals

For Radio Amateurs • By Radio Amateurs

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Portage WI 53901

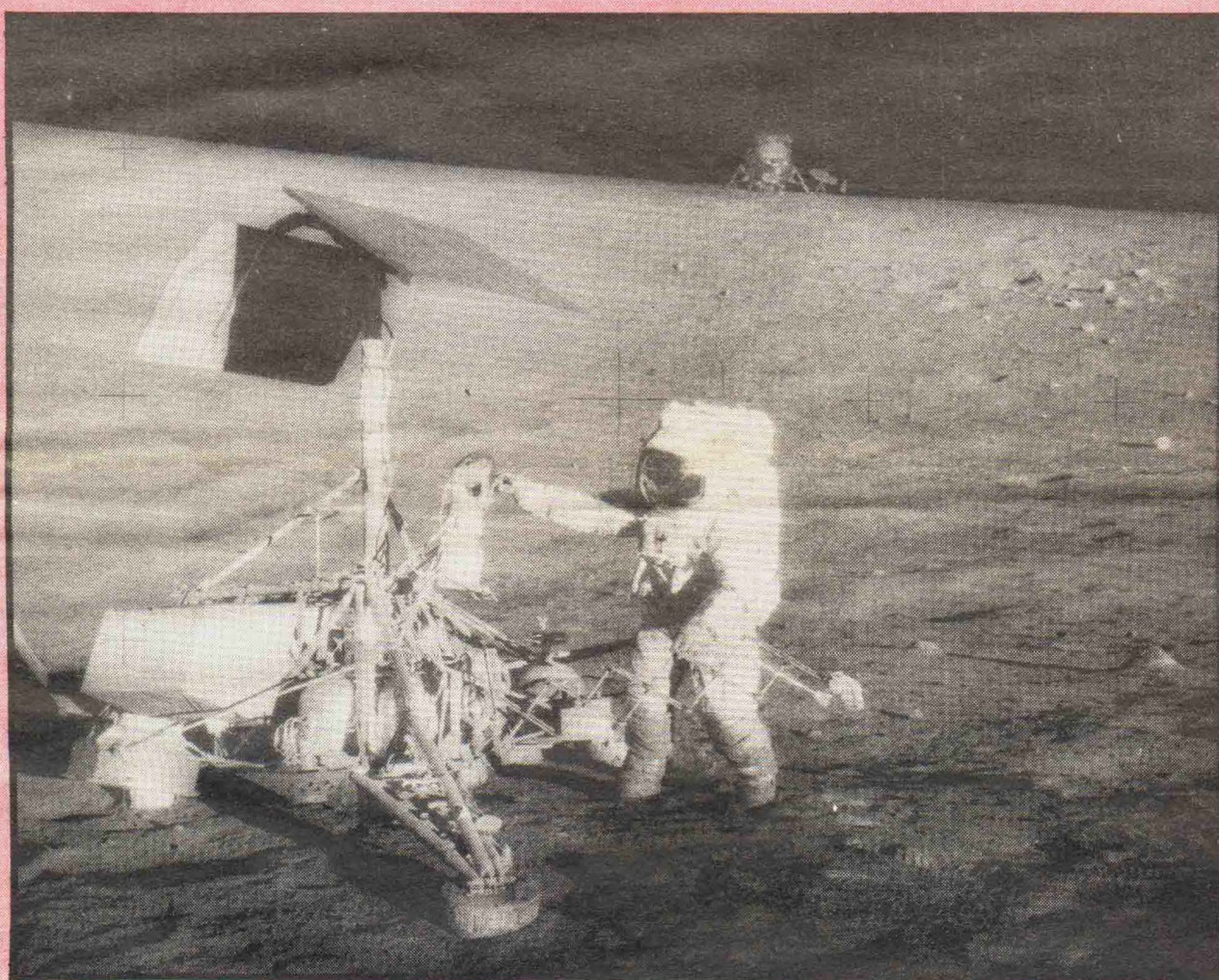
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Twenty Years Ago..



APOLLO 12 landed on the moon in November, 1969. This NASA photo shows Astronaut Charles Conrad, Jr. retrieving an unmanned Surveyor soft-lander's TV camera, which was brought back to

Earth for scientific examinations, along with several other pieces. And, November 1969 is also when Badger State Smoke Signals began publication as Yellow Thunder Smoke Signals.

ARRL Gives FCC Its Own Version of Part 97 Rewrite

The American Radio Relay League has filed extensive comments with the FCC in response to the Commission's proposed reorganization of the Amateur Radio rules (PR Docket No. 88-139). Annexed to the League's comments, prepared by Counsel Christopher D. Imlay, was a complete rewrite of the rules developed by a committee of the ARRL Board of Directors.

The League's rewrite was developed over a seven-month period of intensive study by an ARRL working group consisting of Vice President George Wilson, W4-OYI, and Directors Steve Mendelsohn, WA2DHF, Marshall Quiat, AGØX, and Rod Stafford, KB6ZV, with detailed support from the ARRL Headquarters staff. In addition, the committee digested countless comments of individual League members. The final document represents the interests of the broadest majority of amateurs, while protecting the needs of minorities with special interests. It was reviewed and approved by the ARRL Board of Directors by mail vote.

The Committee noted that many of the comments filed early by individual radio amateurs expressed opposition to certain provisions of the FCC's proposed wording.

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- And lots of other good stuff! -

ELMER

by Rich Regent, K9GDF



Swapfests and other Social Events

SATURDAY, JANUARY 14, 1989. West Allis RAC, 17th annual Midwinter Swapfest, Waukesha Co. Exposition Center Forum, Highways J & FT, Waukesha, WI. Free coffee and donuts until 9:00 a.m. Food and refreshments available, Amateur exams (see test point), Packet Radio meeting. Admission: \$2.00 advance or \$3.00 at the door. Reserved tables: \$3.00 or \$4.00 at the door (as available). Reservation deadline: January 2, 1989. **WARAC SWAPFEST**, P.O. Box 1072, Milwaukee, WI 53201. (see ad last issue.)

SUNDAY, JANUARY 29, 1989. Wheaton Community Radio Amateurs **HAMFEST 89**. Held at the Odeum Exposition Center, Villa Park, IL. 500 reserved flea market tables, ladies programs. Tickets \$4.00 in advance or \$5.00 at the door. **SASE To Wheaton Community Radio Amateurs**, P.O. Box QSL, Wheaton, IL 60189

MARCH 4, 1989. Fox Cities ARC Swapfest, Appleton, WI.

MARCH 19, 1989. The annual Wisconsin QSO Party sponsored by the West Allis RAC. Watch BSSS for complete details.

MARCH 19, 1989. Tri County ARC Swapfest, Jefferson, WI. (see ad on last page)

APRIL 9, 1989. Madison Area Repeater Assn. Swapfest, Madison, WI. (see ad on last page)

JULY 8, 1989. South Milwaukee ARC Swapfest, Oak Creek, WI. (see ad on last page)

As a service to our readers, this section of Badger State Smoke Signals is available without charge to list your upcoming Swapfest, Hamfest, dinner, picnic, party or other event of interest to Radio Amateurs in Wisconsin and nearby areas.

Send information on your event to Kenneth A. Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901. In addition, space is available at attractive rates on our advertising pages.

Club Meetings

BADGER AMATEUR RADIO SOCIETY
(W9YT - UNIVERSITY OF WISCONSIN - MADISON)
Monthly while school in session - 2nd Wednesday 7:30 p.m. - B-314, Electrical Engineering Bldg.

CENTRAL WISCONSIN RADIO AMATEURS, LTD.
(STEVENS POINT)
Second Wednesday.

EAU CLAIRE AMATEUR RADIO CLUB
2nd Tuesday - 7:30 p.m. - Parks and Recreation Bldg., Oxford and 1st Streets, Eau Claire. Hams, guests welcome. Travelers welcome on wide area club repeater K9UXP, 146.31/91.

FOUR LAKES AMATEUR RADIO CLUB (MADISON WI)
First and third Tuesdays - 7:30 p.m. - Red Cross Bldg., 4860 Sheboygan Ave.

FOX CITIES AMATEUR RADIO CLUB
Third Monday - 7:00 p.m. - Roosevelt Jr. High School, 318 E. Brewster St., Appleton. Info: (414) 735-6294. Winter Banquet, January 23, 1988. Contact KA9MPP.

GREEN BAY MIKE AND KEY CLUB
Second Thursday - Red Cross Bldg., corner Danz and Deckner, Green Bay.

GREEN FOX AMATEUR RADIO CLUB
Third Monday - 7:30 p.m. - Green Lake Town Hall, int. of county hwy. K and N.

KETTLE MORAINES RADIO AMATEURS
Second Friday.

LAKESHORE RPTR. ASSN.
4th Tuesday, Jan., Apr., Jul., & Oct., 7:30 p.m. Red Cross Bldg., 4521 Taylor Ave., Racine, WI.

MANITOWOC COUNTY RADIO AMATEURS
First Wednesday - 7:00 p.m. - City Hall, 817 Franklin St., Manitowoc.

Second Wednesday - Red Cross Building, 1816 Washington St., Manitowoc.

MENOMONEE FALLS AMATEUR RADIO CLUB
Last Tuesday - Doors open 7:30 p.m., meeting begins 8:00 p.m. - Security Savings and Loan, Menomonee Falls. Amateurs and guests welcome.

MILWAUKEE RADIO AMATEURS CLUB
Fourth Thursday - Wauwatosa Savings and Loan, 7500 W. State St. (November on the third Thursday. No meetings in July, August and December.) Meetings begin at 7:00 pm.

OZAUKEE RADIO CLUB
Second Wednesday - 7:30 p.m. - Saukville Community Center.

QCWA - WISCONSIN CHAPTER #55
For information about QCWA, contact Richard Regent, K9GDF or Mickey Dolgin, KB9G. The Wisconsin Chapter holds Spring and Fall dinner meetings. (Watch BSSS for dates.) You are invited to check in the QCWA net on Sundays on 3.985 MHz. at 8:30 a.m.

QCWA - SOUTHEAST WISCONSIN CHAPTER #162
Meets third Monday monthly, 7:30 p.m., Around the Clock Restaurant, 3012 Rapids, Drive, Racine.

RACINE MEGACYCLE CLUB
Second Tuesday, 7:30 p.m., Red Cross Bldg., 4521 Taylor Ave., Racine, WI

RIVERLAND AMATEUR RADIO CLUB
First Tuesday - 7:30 p.m. - Onalaska Community Center, Onalaska WI.

ROCK RIVER RADIO CLUB
First Tuesday - 8:00 p.m. - Dodge County Sheriff's Dep't, 141 N. Main, Juneau WI.

SHEBOYGAN COUNTY AMATEUR RADIO CLUB
Second Tuesday - 7:00 p.m. - Sheboygan Red Cross/Boy Scout Bldg., 2032 Erie Ave.

SOUTH MILWAUKEE AMATEUR RADIO CLUB
First Wednesday - Legion Post 434, Shepard Ave., Oak Creek WI. Auctions in March and October.

TRI-COUNTY AMATEUR RADIO CLUB
Second Sunday of each month. Meetings are held at 7:00 p.m., at the Trinity Lutheran Church, 314 Barrie, Fort Atkinson, WI.

WASHINGTON COUNTY AMATEUR RADIO CLUB
Second Tuesday: ARES/RACES - 7:30 p.m., club meeting - 8:00 p.m., Town of Polk Town Hall, Hwy. 60 and Scenic Dr. Net on 146.13/73 every Monday 7:30 p.m.

WATERTOWN AMATEUR RADIO CLUB
First Thursday of the month at 7:00 p.m., Eaton Corp., 901 s. 12th St., Watertown, WI

WEST ALLIS RADIO AMATEURS CLUB
Second Tuesday - 8:00 p.m. - St. Francis Savings, 9330 W. Greenfield Ave.

WISCONSIN ASSOCIATION OF REPEATERS
The annual meeting with election of officers and proposed By-Law Changes will be held on the second Saturday in March. Repeater licensees, trustees, and sponsors are urged to attend W.A.R. meetings. All interested parties are welcome.

BADGER STATE SMOKE SIGNALS

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SUBSCRIPTIONS

1 year	(12 issues)	\$8.50
2 years	(24 issues)	\$16.00
3 years	(36 issues)	\$23.00

ADDRESS CHANGES AND CORRECTIONS should be sent to Kenneth A. Ebner, address above.

EDITORIAL MATERIAL, PHOTOGRAPHS, FEATURE ARTICLES, AND EXCHANGE PAPERS should be sent to Jim Romelfanger, address above.

DISPLAY ADS or INQUIRIES REGARDING DISPLAY ADS may be directed to Harry Westlund or Kenneth Ebner, addresses above.

SUBSCRIPTIONS should be sent, with check or money order (do not send cash), to Jim Decker, address above.

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EDITORIAL DISCLAIMER

The opinions expressed in editorials, guest editorials, columns, articles, and letters are the opinions of the authors only, and do not, unless otherwise stated, express or imply agreement or endorsement by Badger State Smoke Signals, or by any other organization.

WISCONSIN VALLEY RADIO ASSOCIATION (WAUSAU)
First Tuesday - 7:30 p.m. - Location varies; info on 146.04/64, Wausau.

YELLOW THUNDER AMATEUR RADIO CLUB (BARABOO)
Days rotate: 1989 meeting dates: Mon., Jan. 16, Tue., Feb. 14, Wed., Mar. 15, Thu., Apr. 13, Mon., May 15, Tue., Jun. 13, Wed., Jul. 19, Thu., Aug. 17, Mon., Sep. 18, Tue., Oct. 17, Wed., Nov. 15, Thu., Dec. 14, 1989. Monday meetings in room 28B of the Baraboo Civic Center; all others in room 25. Meetings start 7:30 p.m.

Let Badger State Smoke Signals know your club's meeting dates, and we will let our readers know of your meetings and activities. There may be Amateurs in your area interested in joining your club, or members of other interested in making an interclub visit.



The following are known locations where Amateur Radio license examinations are scheduled in the Badger State area.

January 14, 1989	Madison, WI
January 14, 1988	Waukesha WI (BE)
January 14, 1989	Eau Claire WI
January 28, 1989	Watertown, WI
February 1, 1989	Milwaukee, WI (MRAC)
March 1, 1989	Milwaukee, WI (MRAC)
March 18, 1989	Menomonie, WI
April 5, 1989	Milwaukee, WI (MRAC)
April 15, 1989	Eau Claire WI
May 3, 1989	Milwaukee, WI (MRAC)
June 7, 1989	Milwaukee, WI (MRAC)
June 17, 1989	Menomonie, WI
July 15, 1989	Eau Claire WI
October 14, 1989	Eau Claire WI
November 11, 1989	Menomonie, WI
Monthly, First Sat.	Racine, WI
Monthly, Third Sat.	Loves Park, IL

GENERAL RULES FOR MOST EXAMINATIONS:

Be sure to check with sponsors in the event there are changes and/or errors in the dates or information given.

Most examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs permit walk-ins. Check with sponsor.)

To register, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from an FCC Field Office, the ARRL or Badger State Smoke Signals. Send a 25¢ SASE if you request one from the ARRL or BSSS. In most cases, forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$4.75 payable to "ARRL/VEC".

The FCC now requires applicants to show their original Amateur license to the VEC. A copy of your license must be attached to your FCC form 610. You will also be required to have a photo ID, or other acceptable identification.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only.

Additional information is given below.

WATERTOWN, WI
January 28, 1989

Conducted by the Watertown & Tri-county ARCs. Time: 9:00 a.m. to 11:00 a.m. Location: Air Watertown, 1714 River Drive, Watertown, WI. Contact: Mark A. Schultz, KE9C, 200 N. 8th St., Watertown, WI 53094. (414) 261-3411

MADISON, WI - (ARRL- VEC)

Saturday, January 14, 1988

By the FLARC, at 8:00 a.m., Fire Station #2 on Grand Canyon Drive (Madison's west side).

MILWAUKEE RADIO AMATEURS' CLUB - MRAC/VEC

February 1, 1989, March 1, 1989, April 5, 1989, May 3, 1989, and June 7, 1989

Tests are Wednesday evenings at 7:00 p.m. at Wauwatosa East High School, North 74th Street and Milwaukee Avenue. Enter through the southmost entrance on 74th Street. Go to room 256 on the second floor. Please arrive promptly so testing can be completed before 10:00 p.m. Bring your original license and three good photocopies, a pen, and \$4.55 for the exam fee. Walkins accommodated as time permits. Register in advance on a Postal Service 15 cent post card; print the grade of license you are applying for, and your name, address, and telephone number. Send the card to The Milwaukee Radio Amateurs' Club, Inc., 3840 South 43rd Street, #21, Milwaukee, WI 53220. For further information, contact Ed Seruga, KE9JJ, Secretary, MRAC at the above address. Telephone: (414) 545-6299 or (414) 546-0647.

BADGER EXAMINERS (BE) - MILWAUKEE

Saturday, January 14, 1988, 8:00 a.m.

(WRAC Midwinter Swapfest)

Unless otherwise noted, examinations are administered beginning at 1:00 p.m. at St. Nicholas Parish, 5353 N. Green Bay Ave. (2 1/2 blocks south of Silver Spring), Milwaukee. Number for coin telephone at exam location is 228-9994. Walkins are welcome. Bring your original license, a good photocopy of it, and a second form of identification. Technician license holders must bring proof of having been tested prior to March 21, 1987 to upgrade to General with code test only. To register in advance, send a post card with your name, test or tests you wish to take, date you wish to be tested, your call sign, address and telephone number to Badger Examiners, Mickey Dolgin, KB9G, 507 E. Spooner Rd., Fox Point, WI 53217. (414) 351-5311.

EAU CLAIRE, WISCONSIN

January 14, April 15, July 15, October 14, 1989

The July exams will be given in association with our local Hamfest, at the 4-H Junior Fair Grounds. All others will be given in the Facilities Management Building on the University of Wisconsin - Eau Claire campus. All walkins accepted. Sessions are from 9 a.m. to noon. 610 forms are furnished. For more information, call Carl Searing, W9NW, at (715) 834-1303.

MENOMONIE, WI (ARRL/VEC)

June 17, November 11, 1989.

Sponsored by the Dunn County ARC. Walk-ins only. Credit Union Office Building, Conference Room, lower level, 444 S. Broadway, Menomonie, WI. Contact: Dr. Thomas W. King, KD9TT, c/o office, 444 S. Broadway, Suite 1, Menomonie, WI 54751. (715) 235-4747 (O), 235-5757 (H).

RACINE, WISCONSIN - ARRL/VEC

First Saturday of each month except during summer and the Christmas holidays.

Exams are given at the Red Cross Building, 4521 Taylor Ave., Racine, WI. Walkins are permitted.

Send pre-registration to: William R. Firchol, Jr., N9DMP, 1912 27th Street, Kenosha WI 53140.

Third Saturday of every month.

Northern Illinois Volunteer Examiners (DeVry VEC). Held at North Suburban Library on North Second Street in Loves Park, IL. Contact: Gene Melton, AK9N, 2901 Billie Rd., Rockford, IL 61109, (815) 874-6867

MINNESOTA TESTS

To register for these tests, or for more information, contact as follows:

St. Cloud Amateur Radio Club

Len Carlson at (612) 252-0783

Amateur Radio Association of Bloomington

Art Putt at (612) 881-7181

St. Paul Radio Club, Inc.

Mary Ketzler at (612) 426-4438

Minneapolis Amateur Radio Club

Jeff Kolb at (612) 699-6961.

Minnesota test information courtesy of Marv Mahre, W0MGI.

This section of Badger State Smoke Signals is available to publicize your Volunteer Examiner Amateur Radio license examination schedules.

Please send us your schedules of dates, times, and locations that you will be conducting examinations and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be sent to K9EN or K9ZZ at the address shown on page 2.



FOR SALE: Drake TR-4CW with power supply and external speaker. In excellent condition. Contact: Bill Steaffens, N9GTB, 1412 Lincoln Ave., Stoughton, WI 53589. Phone (608) 873-5943

FOR SALE: 160 feet of telescoping tower in two sections, each 80 feet long. Currently erected as a 150 foot fixed tower. Complete with 4 sets of guys. You take down. Located near Bloomer, WI and only \$200.00. Contact Jack Johnson, KC9A, 19380 Fenwood Dr., Chippewa Falls, WI 54729. Phone (715) 723-5905 evenings or weekends.

WANTED TO BUY: Prefer American made. Complete station with digital readout. Mike, Tuner, etc. Write: Ed Malinowski, KA9MVG, Rte. 1, Box 132, Loyal, WI 54446.

FOR SALE: POSTAGE STAMPS: Choose U.S. or foreign. 75 different stamps, \$1.00 postpaid. Ricard Regent, K9GDF, 5003 South 26th St., Milwaukee, WI 53221.

FOR SALE: Kenwood TH-21AT 2-meter HT, extra battery pack and soft case. Contact: Mark A. Schultz, KE9C, 200 N. 8th St., Watertown, WI. (414) 261-3411.

Wisconsin Nets Association Ltd.

WISCONSIN NETS

Net	WNA	Freq	UTC	CST	Manager
BWN	Yes	3984	1200	0600	KC9CJ
BEN	Yes	3985	1800	1200	KA9RII
WSBN	Yes	3985	2330	1730	K9ANV
WNN	Yes	3723	2400	1800	KA9TTM
WSSN	Yes	3645	0030	1830	N9BDL
WIN/E	Yes	3662	0100	1900	WB9ICH
WIN/L	Yes	3662	0400	2200	W9NGP
NWTN	Yes	34/94	0030	1830	NS9Q
Gr Bay	No	72/12	0245	2045	WB9NRK
RACES No		3993.5	1815	1215	WC9AAG
			USB Tues and Thurs		
RACES No		3993.5	1400	0800	WA9OAY
			LSB Sunday		

Section Manager's notes

By Richard R. Regent, K9GDF
5003 South 26th Street
Milwaukee, WI 53221

New Section Traffic Manager is K9EP of Beloit, who is well recommended by traffic handlers, packeteers, and Navy MARS. Many thanks for the outstanding work of K9UTQ in handling the STM duties over the past many years.

New officers MANCORAD: Pres. WB9ESM; V. Pres. KA9ZXG; Sec. KA9ADY; Treas. N9HNP.

Green Fox ARC making use of 19-foot communications trailer and various equipment; has new officers: Pres. KB9WC; V. Pres. N9CXX; Treas. N9ALZ; Sec. N9GVY.

New officers of Oshkosh ARC: Pres. KD9WQ; V. Pres. KB9AIT; Treas. WB9ZHN; Sec. KD9BC.

Milwaukee RAC offers amateur radio license classes consisting of nine sessions. Classes for the Novice through Extra begin February 22nd at Wauwatosa East High School; forms for registering and information are available from KD9AJ. MRAC Club station W9RH will be on air more often; historical articles pertaining to MRAC should be sent to KA9MXM.

Ozaukee RC renewed as a Special Service Club.

When W9LSR/5 and W9KU/7 both checked into the WIN/E, NCS N9BDL quickly remarked, "It's DX Night!"

If everything is coming your way, you're in the wrong lane.

From the Public Information Officer

Jim Romelfanger, K9ZZ
412 1/2 Ash Street
Baraboo, WI 53913

Awareness.. that's the key.

Probably most people (read that non-amateurs) are vaguely aware that there is a hobby called "Ham Radio." But, probably just about everyone knows about CB Radio, and they probably know a lot more about CB than Amateur Radio.

A perception exists, too, that all that Hams and CBers do is play with their radios, and take great delight in busting up TV and radio reception whenever the opportunity arises.

Now, we - as Radio Amateurs - do a whole lot more than "play" with our communications equipment, and we know that; however, unless we educate the general public, our image with a large part of the public will never improve.

That brings me to the point of this article (and you knew this was coming, didn't you?).

Amateur Radio clubs are in an excellent position to not only carry on a continuing public education campaign, but to bring new amateurs into the fold as well.

Most clubs meet once a month; some meet twice. Now, one good way to keep the size of a club down is to have the meeting schedule available to members only. But, if you would like to bring new people into the hobby, and thereby increase your club's membership, tell the public! Send a reasonably concise meeting announcement to ALL the media in your area; that includes newspapers, radio stations, TV stations, and cable TV bulletin boards. Even though it is a meeting announcement, it is news; there should be no charge to a club from a media outlet to publish or broadcast news.

If no program is planned for a particular meeting, then a news release giving simply the meeting day and date, the time, and the place is all that is necessary. Remember, some people do know something about Ham Radio and may want to join the hobby; and even a short announcement might be all some people need to (1) let them know that there is an active club near them, and (2) get them to drop in at a meeting and, perhaps, even join the club.

If your club has an interesting program planned, be sure to mention it in a news release. Keep it as concise as possible, but be sure to provide enough information about the program so readers or listeners may become interested enough to want to come. Be SURE you state in the story that visitors are welcome! In fact, that should be a standard phrase in every news release about club meetings.

Remember, too, that the public is the best judge of whether or not he is interested in a given program; it may be a program that the writer of the news release would be nearly certain that no one but Hams would be interested in - ain't necessarily so!

If your club follows this simple formula, you will be helping your club, and you will be telling the public that Radio Amateurs aren't all a bunch of strange people using strange equipment that makes strange noises and does strange things.

A 30-year-old incident typifies some of the odd attitudes the public may have about our hobby: When I was 16, I lived for a year in Pacific Beach, California (a San Diego suburb). I did not yet have my Amateur Radio license, but I was studying for it. I did have a receiver, and I tossed a length of wire on the flat roof of our apartment building to use as an antenna. The lady in the next apartment told me I burned out her flat iron with that antenna, and she was convinced she was right; no way would her mind be changed! And, since then, I've had a number of other such odd incidents. I suspect I'm not the only one; in fact, I'd like to hear from other Hams about the weird problems they have had along those lines.

Awareness.. that will help. If your club isn't sending meeting notices to the media a week before every meeting, there's no time like the present to start. The expense isn't that great, and the possible rewards just might surprise you! Remember, keeping your club's meetings secret may not kill the club, but it just might stagnate. Keep this guide in mind in your news releases: who, what, why, when, where, and, in some cases, how.

AMATEUR RADIO LICENSE CLASSES

The Milwaukee Radio Amateurs' Club is offering Novice Class for beginners, Technician/General Class, and Advanced/Extra Class classes.

Classes will be held on Wednesday evenings 7:00 to 9:30 p.m. starting February 22, 1988, for nine sessions, at Wauwatosa East High School.

Advance registration is required. Registration fee is \$12.00. You must furnish pencil and paper, we sell you needed texts. For more information and registration form, contact The Milwaukee Radio Amateurs' Club, Inc., c/o Ed Seruga KE9JJ, 3840 S. 43rd St., #21, Milwaukee, WI 53220.

Tasmanian Devil Award

The Tasmanian Division of the W.I.A. created the Tasmanian Devil Award some years ago to stimulate interest in, and as a reward for, making contact with VK7 stations.

The basic rules are quite simple. You are required to furnish proof by way of a log extract that you have worked a specified number of VK7 stations on any band using any mode according to your location and within the terms of your licence since 1 January 1978.

Below 30 Mhz the number of contacts required are:

Australia (including Tasmania)	50 contacts
Oceania & Antarctica	30
Asia & North America	20
Europe & South America	10
South Africa	7

Above 30 Mhz you require 20 contacts with at least one station located in each of the three W.I.A. branch areas (STD code areas: 002, 003, 004).

Self-adhesive upgrade stickers are available when sufficient additional contacts have been made. Details of these upgrades are available from the Awards Manager or from the Net Controller of the regular Tuesday night net held on 3.590 Mhz commencing at 1000Z.

Short-wave listeners are eligible to qualify by adding the callsign of the 'other' station making up the contact.

Claims for the Award should be in the form of a log extract and must show your callsign, name & address, date & time in UTC of the contact, callsign of the station contacted, signal reports sent & received, mode & band used. The claim must be signed by the applicant as being a true and accurate extract from your station log. No QSL cards or counter-signatures are required. A fee of \$A 3 should accompany the claim to cover printing and postage. The fee for upgrade stickers is \$A 1. Claims should be sent only to:

The AWARDS MANAGER, BOB JACKSON, VK7NBF,
'FALMOUTH HOUSE',
FALMOUTH. TASMANIA. 7215.

ARRL Gives FCC Its Own Version of Part 97 Rewrite

(Continued from front page)

A common thread in these comments was that the rules should allow for "due process of law" rather than FCC administrative sanctions taken without judicial hearings. The ARRL rewrite took these comments into account and strengthened "due-process" provisions of the rules.

The ARRL commended the FCC on its work to reorganize, modernize and clarify Part 97 of the Commission's rules. The FCC had succeeded in reducing the length of the present rules from 30,073 words to 24,397. The League's rewrite further reduced the length to 17,045 words, without eliminating necessary substance, and retained the basic structure of the rules as proposed by the FCC. The ARRL version is styled as "Part 96," a number not previously assigned to any portion of the FCC rules, to prevent confusion between old and proposed new rules.

A copy of the ARRL filing, including the complete text of the proposed "Part 96" draft, may be obtained from ARRL Headquarters, 225 Main Street, Newington, CT 06111. For your copy, send a 9 x 12 inch self-addressed envelope with \$1.25 postage.

(From The ARRL Letter, published by the American Radio Relay League)

Russian Space Station On the Air

Amateur Radio operations from the Soviet Space Station MIR have begun. Cosmonauts Vladimir Titov and Musa Manarov are using the call signs U1MIR and U2MIR, respectively. QSOs have been reported between the Soviet spacecraft and Bob McGwier, N4HY, as well as John Biro, K1KSY. Operations commenced on November 19.

The Mir amateur station consists of a quarter-wave ground plane antenna mounted outside the spacecraft, and a 2 watt Yaesu FT 290R FM transceiver, donated by UA6HZ. According to the ARRL Letter's latest information, the operation will be split frequency, with the cosmonauts lis-

FCC: Peeved at Amateurs? National Communications System Fights to Save 220-222 MHz

The Secretary of Defense, acting as the Executive Agent of the National Communications System, has requested the FCC to reverse its decision on Docket 87-14 and keep 220 - 222 MHz for amateur radio use. In its Petition for Reconsideration, prepared by attorneys Wayne Smith and McKenzie Whitaker, the National Communications System, through Secretary of Defense Frank Carlucci, condemns the reallocation Report and Order as "inconsistent with the record of facts."

The government filing notes that the NCS had conducted intense deliberations in regard to the impact that reallocating 220 - 222 MHz to land mobile use would have on the role of amateur radio as a resource to National Security Emergency Preparedness operations. It noted that the need to retain the allocation in the Amateur Radio Service was the reason NCS had initially filed against the plan. Since the Commission had unwisely decided to ignore the NCS and other commentors in its decision to proceed with the reallocation proposal, the NCS virtually demands the Commission to reevaluate the action and retain the spectrum under consideration for amateurs, as this would best serve the public interest, convenience and necessity.

Meanwhile, rumored but not confirmed, are reports that some on the staff of the FCC Office of Engineering and Technology (OET) are livid because of the activities of

hams in attempting to retain the allocation. It appears that OET, which spearheaded the reallocation, expected backlash from the amateur community, but was caught off guard by its level and intensity. As an example, on the closing date for filing Petitions for Reconsideration on the Report and Order on Docket 87-14, in excess of 600 such documents -- the vast majority from amateurs against the reallocation -- were in Commission hands. This figure is believed to be an all-time record.

Another rumored sore point between OET and hams is the Congressional and Executive level pressure brought by amateurs. OET was ill prepared for this, and found itself embarrassed. Washington speculators believe that even if the reallocation stands, this large number of negative responses may be politically damaging to the careers of some in the FCC involved in the reallocation bid: namely, the OET.

In its defense, it should be noted that the Office of Engineering and Technology had long ago indicated that it was prepared to fight to attain and then retain the 220 - 222 MHz allocation for land mobile use. To reverse itself on this at such a late date in the proceeding is tantamount to committing political suicide. Don't expect any concessions from OET, as they now must save face at all costs.

- Fred Maia, W5YI, and others in The Westlink Report

tening on 145.525 MHz (primary) and 145.575 MHz (secondary). U1MIR will transmit on 145.550 MHz. The frequency selections were made based upon the 2 meter allocations for Europe, Africa, and much of Asia. As noted before, the cosmonauts will only operate U1MIR/U2MIR during crew rest and recreational periods and on weekends.

Information from Ed Kritsky, NT2X, says the cosmonauts are currently monitor-

ing at all times, and have heard a number of stateside operators.

- From The ARRL Letter

Editor's note: U1MIR was heard in Baraboo on my scanner; the orbit of MIR does take it near this terrestrial area. If you, or any amateurs you know work U1MIR or U2MIR, we'd like to know about it. Please drop the info in a note to K9ZZ. Thanks!

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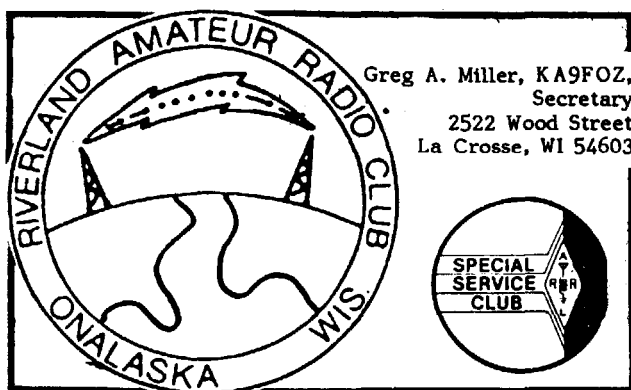
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Greg A. Miller, KA9FOZ,
Secretary
2522 Wood Street
La Crosse, WI 54603

On Tuesday, the 6th of December, at 7:35 p.m., the regular monthly meeting of the Riverland Amateur Radio Club was called to order by Vice-President Mike Tessmer. Minutes of the November meeting were approved as read from the Badger State Smoke Signals. The treasurer's report was approved.

Roll call was taken from the sign-up sheet that was passed around. Total members present was 27; 2 guests were in attendance.

37/97 REPORT

During the month of November, the officers of the club, as well as the repeater committee, met to discuss the purchase of the new repeater. Three models were decided on, with one top choice. It was decided that these would be presented to the members at the December meeting, and a vote taken as to what to buy.

Dan, WCØV, presented our top choice, and a lengthy discussion followed with many questions asked. A vote was taken that we order the Yaesu FTR-2410A repeater and the ACC RC-85 controller; the motion passed.

Another vote was taken that the officers make the final decision concerning a personal loan from one of the members, and to go ahead with the purchase. This motion also passed.

EXAMS

Exams will be on Dec. 20 at 7:00 p.m. in the Community Center. There will be a limited number of walk-ins accepted.

OLD BUSINESS

The officers are still wanting your nominations for Ham of the Year. Submit them to one of the officers by the Jan. meeting.

The Christmas dinner was discussed. The date is Jan. 14 at the New Villa at 6:30 p.m.

A vote was taken and passed that the dues for 1989 remain at \$15. This is due by the March meeting.

NEW BUSINESS

There was a suggestion that we find a place where we can order call sign badges that also have our club logo on them. This will be looked into at a later meeting.

Dick, KØJYB, gave a brief talk on a TVI problem that he had worked on last month, letting us know what the result was.

Charlie, KA9UUK, showed us the junction box that he donated to the club and

demonstrated it. He also purchased a new recorder for playing the code tapes. The membership thanks Charlie for his generosity.

The meeting was adjourned at 8:40 p.m. The drawing was won by George Kroner, KA9HOP.

Respectfully submitted:
Greg Miller, Sec./Treas. RARC

PRESIDENT'S GAVEL - DECEMBER 1988

Those of you who missed this meeting really missed out on one of the most important sessions, since the Tri-State Repeater Association and the Onalaska Wireless Club merged. As it shows in the minutes, the club has decided to purchase a new repeater and controller to replace the current ones in service. The price to pay may seem quite high, but considering that the current machine has been on the air since 1973 - that being 13 years - and if the new equipment lasts for ten years, it would cost the club roughly \$20.50 a month to have. Plus, we will have a controller that is flexible to change with the needs and requirements of our club.

I personally believe that the new equipment will be a big plus for our area, and something its club members will be proud of and want to use.

There are a lot of neat features on our controller that will amaze you, the user. Some of them are reverse patch, talking S-meter, user loadable 190 memory autodial, 10 emergency autodial numbers, many sets of remotely programmable courtesy tones, synthesized speech with custom Ham vocabulary of 500 words (plus numbers and letters), etc. The list is too long to mention here.

Where did all the money come from for this, you ask? The club had over half in our current Repeater Fund savings, and the rest came from a very generous member who loaned us the rest interest-free, with payment due within a year. The terms for payment are to be negotiated by the officers.

When the new stuff arrives, we will be looking for people to help mate the gear together. Dan, WCØV, suggests that we have, at the very minimum, 5 people to help do this so there will be enough people who know enough about the system to help take care of normal maintenance (by maintenance, I mean programming, etc.), interconnection, and the like. If you are interested, contact one of the officers.

Many of you who attended the last meeting were winners of our lottery.. tee hee tee hee.. Your input for our club programs is very important to your Executive Committee in helping them plan for things that you want to see and do. They do not have to be Ham-related, either.

REMINDERS

The club dinner (Christmas) will be at the New Villa Jan. 14 at 6:30 p.m. There will be door prizes and fun will be had by all, soooo don't miss it!!!!

January will be the election of officers. I urge everyone to attend who can, because this sets the direction of your club for the next year; you don't want to miss this one either.

THANK YOUS

To Charlie Burch, KA9UUK, for his generous loan to the club, and also for his donation of the listening station and tape player to use for testing. This is a definite show of dedication to our club. Again, thanks a million!

And, a very special thanks to the two guys who have helped make my job fun this year as your president, those being Mike Tessmer, NØBSH, and Greg Miller, KA9FOZ. Without the dedication of these two, your club wouldn't have been what it was this year.

73 for now, Craig

MEMBERS PRESENT

Arby Boomer	N9HBQ
Craig Goldbeck	N9ETD
Mike Tessmer	NØBSH
Karl Olberg	W4ST
John Kass	WA9IZY
Charlie Burch	KA9UUK
Bill Wood	WB9VYI
Dick Low	KØJYB
Ron Reed	KD9OY
Herman Ludvik	W9HJV
Bill Winder	K9EGQ
George Kroner	KA9HOP
Curt Phelps	KA9YPF
Jack Yoshizumi	W9KTD
Greg Miller	KA9FOZ
John Jorenby	KA9ETH
Ray Wakeen	WA9HHM
Nook L. Bentzen	K9EGO
Phillip Long	KA9RLI
Dan McKenzie	WCØV
Rick Williams	KV9U
Knute Knutson	W9SFL
Hugh Barker	KAØEJZ
Art Osborn	WØJDC
James Burcum	K9LBX
John Young	W9KAZ
Gary Webb	N19V

GUESTS PRESENT

Karl Simonson	
Tom Gromacki	KB9BIS



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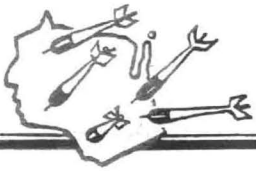
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HERE and THERE



HAMMING IT UP: Shown in this semi-historic photo is Bud Koepfel, W9HIF, of Brookfield, near Milwaukee. He's auctioning the trophy at one of the Ground Hog parties, held in Watertown in the Fall. This photo was taken around 10 years ago. The trophy is said to bring good luck and success to its temporary owner during the next 365 days; it's returned and auctioned again the next year. The trophy's name is "GHONA," standing for Ground Hogs of North America. "Ground Hog" refers to a group in the Watertown area who worked 10 meter ground wave in the late 1940s. 10 meters was the first band opened to Hams after the end of World War II.

:-----:

RADIO REFURBISHING: Howard Trimble, K6TER, is working on some Heathkit tube type equipment to put it back into good working order: an Apache transmitter and a Mohawk receiver. He says he's finding tubes without any problem, but finding filter capacitors is another story. Those capacitors were higher voltage in tube equipment, and they are hard to find in these solid-state days, with its correspondingly lower voltages. If you have a filter capacitor or two laying around which would work, please let Howard know: write to him at 1544 Law Street, San Diego, CA 92109. Thanx!

Eau Claire Amateur Radio Club

Bob Fallis, W9BAR,
Secretary
1851 McKinley Road
Eau Claire, WI 54703

The next meeting of the Eau Claire Amateur Radio Club will be held Tuesday evening, January 10th, at 7:30 in the Parks and Recreation Building, 1300 First Avenue, Eau Claire, WI.

MINUTES OF THE DECEMBER MEETING

The meeting was called to order at 7:30 by our president, Jerry Marx, NG9A. Twenty nine members were present. The minutes of the November meeting were read and approved. There was no financial report.

ANNOUNCEMENTS

The annual Christmas Party will be held at the American Legion Hall on Water Street, starting at 6 p.m. All members are urged to attend.

Dues for 1989 are now payable. The fee has been changed to fifteen dollars for all members. Membership includes a sub-

scription to Badger State Smoke Signals.

Dave Hanson, K9ZVZ, reported to us on the 144.87/145.47 repeater. He has a few problems, but it is up and running. He doesn't expect much progress until the weather warms up. All members are invited to use it.

W9NW announced that tests will be held January 14th. Hours are from 9 a.m. until noon. Walk-ins are welcome.

Excerpts from the latest W5YI letter were read to us from Carl, W9NW. He wanted us to know how incentive license rules are likely to be changed, and what the present thinking was on no-code licenses. This generated a lively discussion on the subject. Our membership indicated by a 22 to 7 margin that they favored some type of no-code license.

Election of officers for 1989 was held. Our officers for 1989 will be as follows:

President, Jerry Marx, NG9A
Vice-President, Mike McAlister,
WD9DLM
Secretary, Bob Fallis, W9BAR
Treasurer, Bill Jablonske, W9NNS.

The meeting was adjourned at 8:25 p.m.

Coffee and lunch were served after the meeting.

Respectfully submitted:

Bob Fallis, W9BAR, Secretary

Correspondence

From Our Readers

To: Editor, Badger State Smoke Signals

Your publishing of the article "The Last Hamfest" was indeed filling up some space in the nice magazine that you publish. It was food for thought, but mostly in opposition to the article's theme.

I think Mr. Richard Steck is missing some things in his "Problems" concerning hamfests.

First, why are there more and more hamfests these days, compared to some 10 or 15 years ago? I only have been a ham for 18 years, so I do not know much of what happened before that.

Mr. Steck indicates disgust at seeing more and more computer equipment at hamfests. For some reason the sight of computers there turns him off.

I may be an old ham (60 years old), but the sight of those neat machines turns me on. Something he has not learned in life is that life is nothing but a changing picture. What we know of as the situation today, will not remain as it now appears. Tomorrow everything will be different, including hamfests. The computer age is here and it is nicely being incorporated into the ham hobby.

Computers and hamming do fit together and computers do belong at hamfests. I find some of my best computer buys there, complete with ham oriented software.

Improving the "Quality" at hamfests, as Mr. Steck points out, by enforcing a "radio only" rule would serve to stop me from going to such a hamfest. So if he wants to preserve hamfests, for such a "stopping of the changes of this world", so be it. Don't

(Please turn to page 8)

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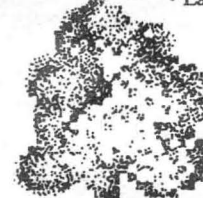
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Good Crowd Sparks Open House

A large crowd, including many Radio Amateurs, attended the annual Open House of Resonance Research Corporation near Baraboo on Saturday, October 19, 1988. RRC manufactures large-scale electrical and electronic equipment, primarily for research and study, including Tesla coils with output voltages of 20 Megavolts or more. A number of the Radio Amateurs brought along families and friends, some from great distances.

Among the Radio Amateurs in attendance were:

James R. Popanz, N9FOL, Wausau, WI
 Tony Hermanek, WB9LAI, Schofield, WI
 Herman Bielefeld, W9SFK,
 Waterford, WI
 Ned Westman, W9QH, Wausau, WI
 Duane Grotophorst, KA9HKL,
 Loganville, WI
 Dave Rece, NO9M, Stoughton, WI
 Jim Waldorf, KB9AQQ, Madison, WI
 K. K. Anderson, N9FRK, Madison, WI
 Pat Davis, KD9UU, Madison, WI
 Mike (KAØOEV) and Debbie Craig,
 Hokah, MN
 Tom (KAØATU) and Nadine Tippery,
 Hokah, MN
 Todd D. Fast, N9DRY, Wauwatosa, WI
 Kevin Kolpitzke, WB9YHB, Madison, WI
 Jim Romelfanger, K9ZZ, Baraboo, WI

D. C. Cox (ex-WA9JDW), owner of RRC, asked us to pass along his thanks to all who stopped in to enjoy the show, and says "I hope to see them all - and more - next October."

YLRL 50th Anniversary Award

The Young Ladies Radio League would like to invite you to join us in the celebration of our 50th anniversary in 1989. We are offering a special award in recognition of the event.

The YLRL 50th Anniversary Award is available to any licensed amateur in the world.

Two-way communications must be established on the amateur radio bands with fifty (50) YLRL members during the calendar year 1989. Any and all amateur radio bands may be used. Cross-band, repeater, or net contacts DO NOT count.

Applications must be received no later than December 31, 1990, and should include a list of contacts, including date, call sign, time, RS(T), band, and mode. Please indicate and sign on your log that you have operated consistent with the rules of the award and your license privileges. Include your name, call sign, and mailing address. Applications should be accompanied by four dollars (\$4.00) USA. Non-USA applicants may choose to remit \$4.00 USA or 5 IRCs. Any proceeds over and above the cost of printing and distributing the certificates will be transferred to the YLRL Scholarship Fund.

Decisions of the Certificate Custodian regarding interpretations of these rules, as here stated or later amended, shall be final. All inquiries regarding applications or the certificate should be addressed to the Custodian as follows:

Joan M. Gibson, KG1F
 RR 1, Box 1465
 Waterbury, VT 05676.

CORRESPONDENCE FROM OUR READERS

(Continued from page 7)

look to those hamfests as being popular with any crowd other than the old timers, who don't spend any money any how. So, if you wish to visit the "Last Hamfest", visit the hamfest that has a "Radio Only" rule. You won't see many sellers or buyers.

Thanks, Mr. Editor, for reminding me that the changing face of hamfests is the real drawing card for myself (and I suspect many others). Sure, I expect to see the "boat anchors" and dust covered junk, still in their cardboard boxes, fresh from storage in the ham's basement (only to be returned there at the end of the day). However, I look forward to seeing new stuff, slightly used stuff, even non-ham stuff and I hope it keeps on changing.

73,

Cliff Lawson, W9ZI

THE BARGAIN MODE

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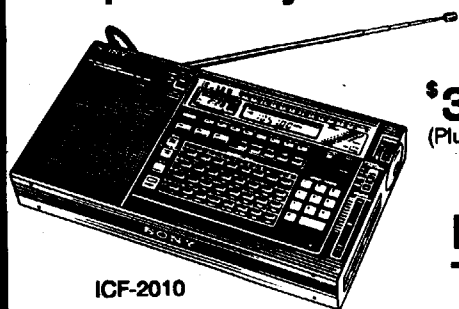
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WANTED: Service manual for Samsung VT-221T VCR. K9ZZ; address page 2.

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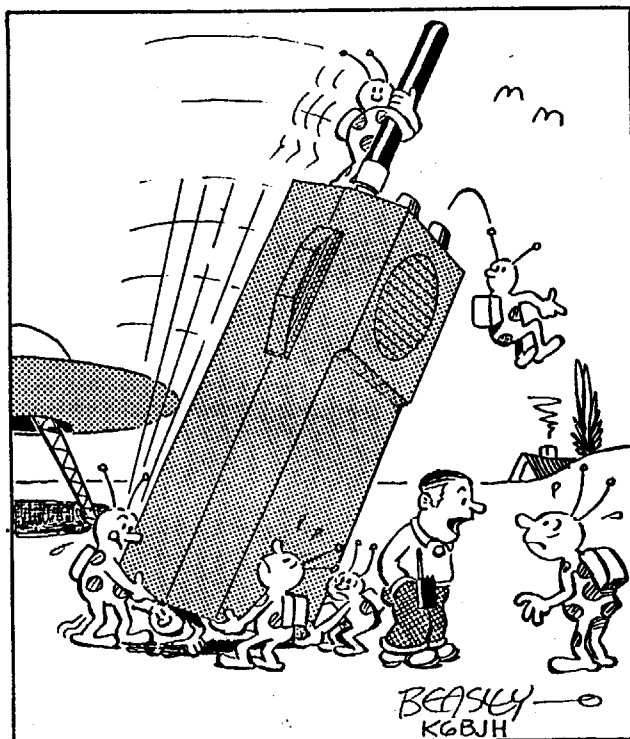
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December 18, 1987

MAXCOM Incorporated
Mr. Sonny Irons, President-CEO
Fort Lauderdale, FL

Re: MAXCOM 200D #31005907
Purchased 10-12-87

Dear Sonny:

I have had the above "200D" in operation for nearly 2 months now after securing same from you on 10-12-87. I'm pleased to report that all is working exceptionally well - in all services. As I indicated on my warranty card earlier, this station is involved in multiple services (i.e., USAF MARS [now Indiana State Region Director] AFA1MU/AFF1IN; USAF CAP [Major] Great Lakes Region Staff [Communications] as Great Lakes 14) including very active involvement in the amateur radio service (FCC FOB AA/00; AIRS; RACES; ARES etc). These services require operation on many specific freqs between 1.8 and 30 MHz. The broadband multimode ICOMs and the single MAXCOM 200D are fully serving these requirements.

I have been pleased with the results and happy to receive very acceptable signal reports (band propagation permitting) from all stations with just 100 watts of power. I have a multiple position station for these services and am planning to install yet another antenna with 70' sides (140' overall) in an inverted "V" configuration up about 40'.

I am pleased with your product Sonny-in spite of some bad press I've seen in the past. Proof is in the performance - and the satisfaction of this customer!

Thank you for your past courtesy and an excellent introduction to this outstanding antenna matcher product.

73,
Jack Forbing

Jack D. Forbing, K9LSB
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New Products

QRV EMERGENCY ANTENNA PACKS

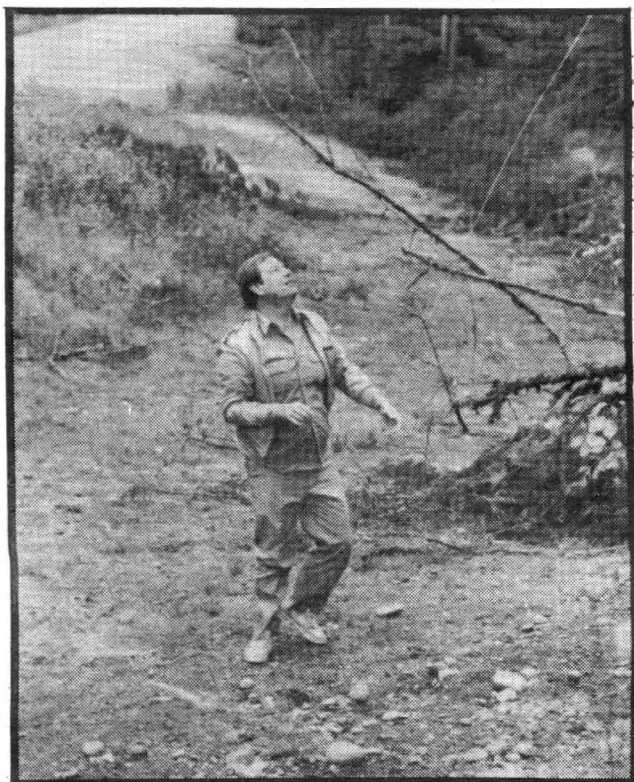
About mid-summer, a few of us in the Bellevue area began getting together two weekends a month to head for the mountains and operate QRP. We didn't need any special event, we just began going out and doing it.

Sometime in July, I ordered the QRV 40-10 Emergency AntennaPack from AntennasWest. I figured the emergency pack would make it easier for us to put up an effective antenna on the fly. As it turned out, it really did.

There are three versions of the QRV Emergency AntennaPack, one covering 160 thru 10 meters, another covering 80 thru 10 meters, and a third, more compact, covering 40 thru 10 meters. The QRV 40-10 Emergency AntennaPack contains a 50-ft. center fed antenna that performs on all bands 40 thru 10 meters.

The antenna itself is based on the familiar G5RV design, but it is made with a special, highly flexible kink-proof wire that is fully insulated. This makes it very easy to suspend in a hurry. The system also includes a 70-ft. length of coax to extend the feedline, along with everything else needed to launch and suspend the antenna without climbing or hassle.

The whole system comes in a two-gallon pail, complete with checklists printed on the side. In addition to being a durable and practical container, the pail is a key part of the clever launching system. The materials are of excellent quality, and all parts and supplies are included and complete. There is a 52-page manual that explains how to get the best results for different operating goals and site possibilities.



Mark Allen, WJ7X, surveys a successful launch with the QRV Emergency Antenna System.



Mark McKibbin, WR7V, operating emergency portable with QRV Emergency AntennaPack. AntennaPack container is shown on top of transceiver. Over 200 QRP QSOs were made with this setup.

Now, when we go out for a ham adventure, we go up any road we haven't traveled and see how high it will take us into the Cascades. When we find a nice spot, we take out the QRV Emergency AntennaPack, give it a toss, and start talking.

On a recent adventure, we took off with our QRV gear, my Icom 735, and a Jeep, to see what we could do in the Mt. Baker National Forest northeast of Seattle. Mark McKibbin, WR7V, and his wife Nancy, joined me. Using the QRV 40-10 emergency antenna system, we operated from six different locations and made over 200 contacts worldwide on the 10, 15 and 20 meter bands. We had adjusted the Icom 735 to operate at only 5 watts output, and we ran the whole system without a tuner.

The launcher system worked great. After about five minutes of practice, I could place the projectile close to where I wanted it. We had the antenna as high as 70 feet at one location. Total time to assemble and erect the antenna to an operating configuration after the first time was 9 minutes to on-the-air. This truly is a QRV quick-deploy antenna.

We used the antenna mainly as a sloper, as advised in the very complete installation manual. In addition to the sloper, we tried the inverted-V and the restricted space loop also outlined in the manual. Both of these configurations worked well, too.

In summary, I think the QRV Emergency AntennaPack was a good investment. I would be happy to recommend this antenna system to my fellow amateurs with a clear conscience.

QRV Emergency AntennaPacks are available from AntennasWest, P.O. Box 50062, Provo, UT 84605, telephone 1-801-373-8425. Prices are \$139.95 for the 160-10 version, \$99.95 for the 80-10 version, and \$89.95 for the 40-10 version. Add \$10 shipping and handling. Add \$5 for second day air delivery.

(Reviewed by Mark S. Allen, WJ7X
Consulting Radio Engineer
Box 3306, Bellevue, WA 98009)

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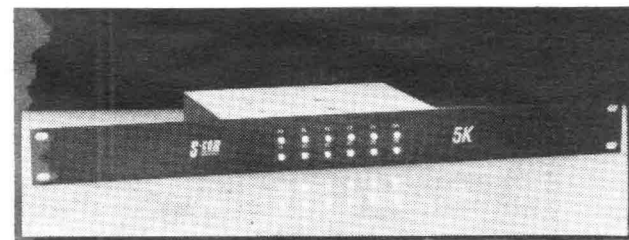
ICOM EX-20 AUTOMATIC ANTENNA SELECTOR

ICOM is pleased to announce the new EX-20 automatic antenna selector for the 6M/10M IC-575A/H.

When connected to an IC-575A/H transceiver, the EX-20 can automatically select between two connecting antennas: a 50 MHz VHF or 28 MHz HF antenna. Another excellent feature of the EX-20 is its adaptability to an additional HF radio.

Suggested retail price is \$75.00. The EX-20 is currently available.

(ICOM news release)



S-COM INTRODUCES DISPLAY CABINET FOR 5K REPEATER CONTROLLER

Know your repeater's status at a glance with the new Display Cabinet option announced by S-COM Industries for its popular 5K Repeater Controller.

The cabinet may be retrofitted to any 5K controller without soldering or rewiring, and offers the high quality and precise engineering users have come to expect from the company.

The Display Cabinet sports a clean, new look created by a non-chipping black anodized front panel, white graphics, and the use of hidden fasteners to eliminate unsightly screw heads and other hardware.

Large, deep red Hewlett-Packard Al-GaAs LED lamps inform the viewer of important circuit status data, i.e. Receiver COR, Transmitter PTT, CTCSS Decoder, Control Receiver COR, DTMF Data Valid, Power On, Logic Inputs 1, 2, and 3, and Logic Outputs 1, 2, and 3.

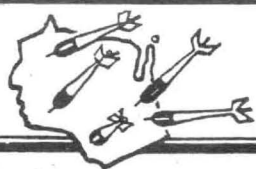
In addition, these new LEDs feature high light output while consuming ONLY 1 milliampere each, making this a practical display even for 5Ks at battery operated repeater sites.

A conductive iridite-plated chassis box reduces RFI and houses the 5K board, Display Board, and an optional Audio Delay Module.

The cabinet provides cutouts for the 5K's power and input/output connectors, and uses PEM fasteners to eliminate troublesome nuts and standoffs. A ribbon cable assembly attaches to connectors located on the 5K and Display boards, making installation a snap.

The assembled and tested Display Cabinet is priced at \$69 plus \$5 S&H. A similar cabinet is available without the display feature. Contact S-COM Industries, P.O. Box 8921, Fort Collins, CO 80524, telephone 303/493-8316.

(S-COM news release)



HERE and THERE



PICTURED ABOVE AT RIGHT is Roy Pedersen, K9FHI, of Juneau, WI. He is a former Section Communications Manager (SCM - an elected ARRL position, later renamed Section Manager) for the Wisconsin ARRL Section. Roy is Secretary of Wisconsin Chapter 55 of the Quarter Century Wireless Association. The other feller in the photo is Roy's son Gary, KA9BAE. They were captured on film by BSSS Chairman/Roving Photographer Ken Ebnetter K9EN, at the Jefferson Swapfest in March, 1988.

:-----:

FCC INCREASES MAXIMUM AMATEUR EXAM COST: The FCC announced that effective January 1, 1989, the maximum allowable fee for an amateur operator license exam administered at a VEC-coordinated session during 1989 will be \$4.75. The present maximum charge is \$4.56; ARRL/VEC charges \$4.55 for amateur operator exams given by ARRL VEs through December 31, 1988, after which the charge will be \$4.75.

The 19-cent increase authorized by the Commission is due to a 4.2 percent increase in the Department of Labor Consumer Price Index (CPI) between September 1987 and September 1988.

Volunteer Examiners (VEs) and Volunteer Examiner Coordinators (VECs) may charge examinees to recoup out-of-pocket expenses for preparing, processing and administering exams for Technician class and above (elements other than 1A and 2.) This reimbursement is for any one exam session, regardless of the number of elements administered, and may not exceed the maximum allowable fee.

There is no fee charged for prospective Novice class operator licenses.

(From The ARRL Letter, 11/18/88)

:-----:

ARRL OUTGOING QSL BUREAU RATE CHANGE: Effective February 1, 1989, QSL cards bound for overseas will be shipped for \$2.00 per pound. Packages of 10 cards or less will continue to be distributed at the rate of \$1.00.

The ARRL Outgoing QSL Bureau has not increased fees charged for this valuable service to ARRL members since its inception in 1976, despite the fact that postage had increased several times.

(From The ARRL Letter, 11/18/88)

Weather Rock Forecasting

In keeping with the conviction that weather forecasting is less than a perfect science, I offer an alternative technique for determining the weather. This system is foolproof, and is so reliable, in fact, that it can be used to settle serious disputes. Called the "Weather Rock," it has been in use in the old country for years, where peasants determined their daily activities according to the message it provided.

Requiring only simple materials, and a couple of minutes to construct, you can have a foolproof weather-detecting system installed outside the window of your shack in minutes. Check into the Badger Weather Net with this baby, and you're sure to be a hit!

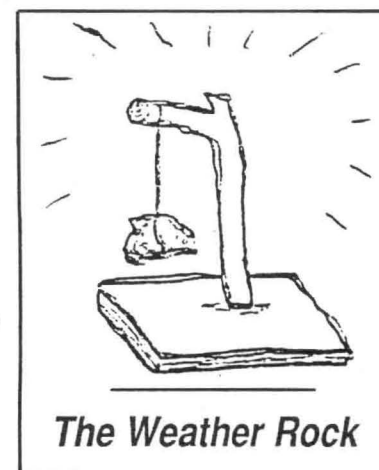
- From Watts Snoo,
Central Wisconsin Radio Amateurs,
Stevens Point, WI

ROCK CONDITION

Wet
Damp
Can't see it
Icy
White (mostly)
Hot
Cold
Oscillating
Jumping
Swinging slightly
Swinging strongly
Gone

WEATHER CONDITION

Rain
Drizzle
Fog or Night
Sleet
Snow
Hot Weather
Cold Weather
Tornado (Tune to SKYWARN Net)
Earthquake
Breeze
Strong wind
Stolen



US DISTRICT COURT OVERTURNS ZONING ORDINANCE: A US District Court in New Jersey has overturned a restrictive television receive-only (TVRO) zoning ordinance by the Town of Maplewood that would have "unreasonably impaired" the installation and use of home satellite antennas.

The Court cited the 1986 FCC preemption that prohibits local municipalities from unfairly restricting home dish installation and use. The Maplewood ordinance restricted antenna height to 6 feet and placed landscaping, set-back and other restrictions on the homeowner as well.

The case of Van Meter vs Township of Maplewood marks the first time a federal court has used the FCC preemption to overturn a TVRO ordinance.

(From The ARRL Letter, 11/18/88)

:-----:

ATLANTA RADIO CLUB ANNOUNCES SCHOLARSHIP: The Atlanta Radio Club, Inc., announced that it will have up to \$2000 available for the successful applicants to its 1989 scholarship program.

To qualify, applicants must be licensed radio amateurs graduating from high school and entering an approved college or university as freshmen for the first time.

Awards will be made on the basis of scholarship, Amateur Radio achievements, citizenship and/or leadership and financial need. Some preference will be given to those living in Georgia and adjoining states. For further information and application forms, contact Phil Latta, W4GTS, 259 Weatherstone Parkway, Marietta, GA 30068. (From The ARRL Letter, 11/18/88)

VOLUNTEER EXAMINER GROUPS: When you send your examination schedule to Badger State Smoke Signals for 1989, make a copy and send it to Jim Coleman, KA6A, Rte. 1 Box 55A, Ivesdale, IL 61851. Jim assembles an exam list for Illinois, Indiana and Wisconsin exam sessions. Last year, his list went to over 300 individuals and organizations, some publications, and was listed on various packet radio BBS stations. He needs (1) the city, (2) the date(s), (3) name and call sign of a contact person, and, (4) that person's telephone number. His deadline is around December 25, so prompt responses will be appreciated. Jim can be reached on packet via KA6A @ K9CW (ZIP code 61801), or by telephone at (217) 564-2451.

:-----:

IF YOU ARE PLANNING A SPECIAL EVENT STATION OR A SPECIAL EVENT, we'd like to publish the info! But, if you tell us about an upcoming event, follow up afterward with a short story! It's disheartening (and irritating!) to publish advance notices, but to see no followup, except perhaps via rumor or via a third party.

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	NextDay	2nd Day	ASAP	
Baraboo, Wisconsin Saulk County K9ZZ	100	\$29.95	\$24.95	\$19.95
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	400	\$49.95	\$44.95	\$39.95
	500	\$54.95	\$49.95	\$44.95
	1000	\$99.95	\$89.95	\$79.95

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AntennasWest
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For overnight air delivery add \$10.
Box 50062-SS, Provo, UT 84605



John's Junk Box

By John W. Frank, WB9TQG
P. O. Box 5113
Madison, WI 53705

HOMEBREW COAX SWITCHES

Not long ago, I needed a coax switch so I could route one antenna to one of three radios. Although this type of switch is readily available from a number of manufacturers, my frugal nature told me I could build one with parts from my junk box.

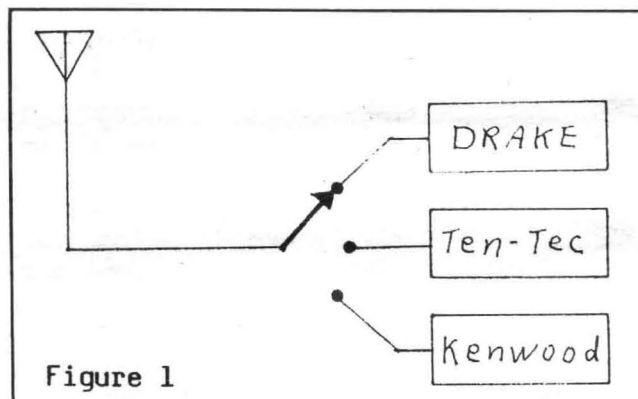
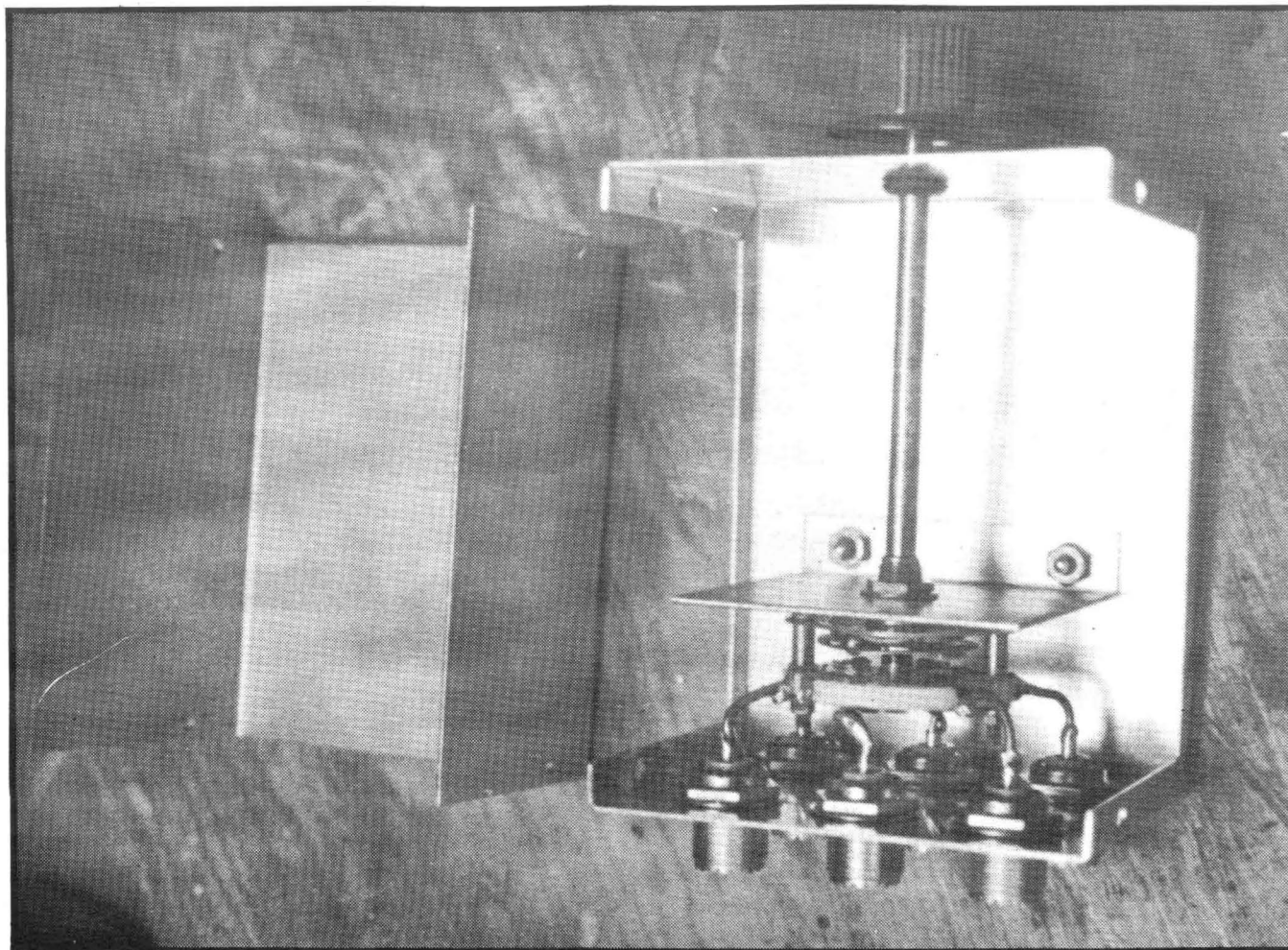
Luckily, my junk box contained all the necessary parts: a rotary switch (ceramic), SO-239 connectors, a metal box, heavy gauge copper wire, and a knob that fit the switch shaft.

The switch I used has ceramic insulation and large contacts. To minimize losses, I avoided small switches with phenolic or plastic insulation. SO-239 connectors were used because they will mate with the PL-259s already in the shack.

As usual, I used a metal box with tight, overlapping seams. This is a worthwhile precaution, because radio signals can sometimes be uncooperative little devils that don't always go where you want them to go. The shielding provided by a metal box helps keep the signals going where I want them.

As the photo shows, there's a lot of unused space in the box. However, the back of the box is covered with connectors. The switch was positioned as far back in the box as possible to keep the length of the wiring short. Long leads would mean more inductance and stray capacitance between wires.

When building a coax switch, three of the most important considerations should be: (1) the switch itself; (2) the metal box, and (3) direct wiring from the connectors to the switch terminals. When working with



junk box parts, you may not always have exactly what you need. I accept that as part of the challenge of the hobby. Some people enjoy the challenge of DX; others enjoy QRP.

Well, enough editorializing. Figures 1 and 2 show two very common uses for coax switches.

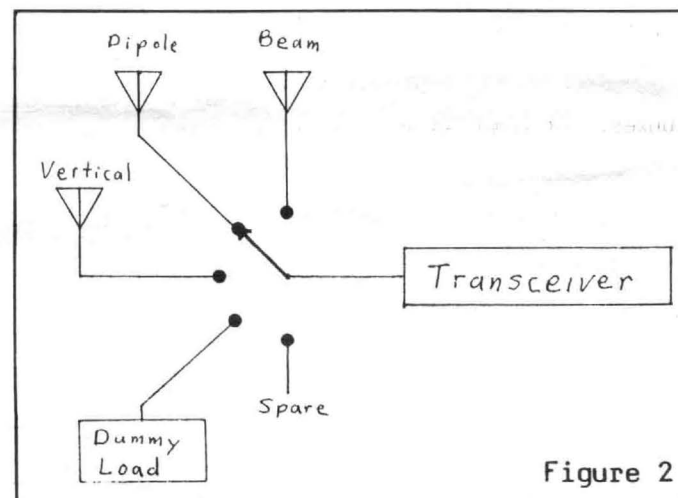


Figure 2

73,

John



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Year

from

Badger
State Smoke
Signals





THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association (WAPR)

c/o CARL SCHUMACHER, N9BYS
7740 EVERGREEN TERRACE
BURLINGTON, WI 53106

Steve Loeffler, WB9ZRE, Editor, 123 W. Oshkosh St., Ripon, WI 54971

SLG (Slinger, WI) Digi Antenna Problem

Dan - WB9TYT reported that the top section of the G-7 Hustler antenna in use at the Slinger Digi node snapped off just below the top col-linear on the evening of December 14. The damage reduced the range of the digi, but, did not put it off the air. Dan plans to have the antenna replaced before you read this and apologizes for any inconvenience to users.

Personal Mailboxes and BBSs

Bob - N9BKJ, sysop of N9BKJ BBS in Waupaca, WI has noted new operators listing their personal mailboxes as their 'Home' BBS when prompted for this information by a full-blown BBS.

Your 'Home' BBS is the area BBS you normally check into for mail, bulletins, etc. There are several types of BBS software programs, and several are not compatible with TNC mini-mailboxes. (RLI/MBL/AA4RE, of which N9BKJ is currently running, is one example).

If you have already listed your mini-mailbox as your 'Home' BBS, you can easily change it by re-entering the 'Home BBS' command followed by the callsign of the BBS, for instance, if you check into N9BKJ BBS most frequently and want to designate it as your 'Home' BBS, then use the command: NH N9BKJ and your mail will be held at N9BKJ for your personal retrieval.

The TNC mini-mailboxes are not intended for interfacing with major networks, rather, they are a convenience for local operators to leave local messages to other local stations.

BLTNS designator

You will be seeing more of this designator in the 'TO' header of BBSs. It will be used to identify messages that were originated outside the state of Wisconsin. Previously, the designation was ALLWI which should only be used for messages originating inside Wisconsin. This change was implemented by Dan - WB9TYT to reduce confusion on the origination point of messages passing thru the state.

NFR Fund Drive

For about 1 month now I have been conducting a fund drive to help keep NFR, (WA9SOU-2) on the air, and serving the whole middle of the state. NFR is a node located in North Freedom, WI. on otherwise unused/decommissioned county tower. The tower by the way is 100+ feet high and sits on ground that is about 1490' AMSL, THATs HIGH! Anyway, the tower needs it's multiple guys re-

tensioned (turnbuckles are bottomed out) and various other repairs or it will come down..Right now, the tower is not safe to climb but would be when the guys are properly set up again. Being on public property any serious work to be done has to be carried out by a professional rigger, with insurance and know how...A costly venture.

I don't think I need to tell most of you that without NFR, traffic of any kind would be almost impossible to get across the middle of the state. So, I started a drive for funds to see to it that NFR stays on the air..Plans for spring include some sort of UHF node, probably full-duplex in nature, and some other toys..

To date I have received generous donations from:

Doug, W9WI (a sum too large to mention)
Riverland Amateur Radio Club
Bill, W9ZBD
Bryan, N9GBJ
Duane, NX9K
Tom, KM5V
Kent, W9LZQ
Greg, N9HCY

It should be noted that these unselfish people have put us much closer to our goal. Almost without exception, these folks are either bbs ops or, TCP/IP users, serious about making packet continue to work and advance. Behind the scenes we also have John, WA9SOU who has spent countless hours, and lots of his own \$\$ keeping NFR in service. I too plan on donating a large part of the hardware needed to make NFR a 2 or 3 port node by spring (once we pay off the tower rigger). NFR is sort of like the "88" of the WISCONSIN packet world, it can no longer survive without it's loyal users. (ARE YOU ASLEEP YET??)

Please take a moment to zip off a check for whatever your conscience dictate and your budget will allow and send it to:

Patrick Davis, KD9UU
514 W. Lakeside St.
Madison, Wi. 53715-1728

I will see to it that 100% of your donation goes directly to survival & improvement fund for NFR. Typical donations have ranged from \$10 to \$50 and have averaged about \$25..Heck, even a buck from everyone who has ever used NFR would be a lot of

dough (wish it worked that way)..

Questions?? Give a jingle @ 608-255-3596 (PAT) or leave a note for KD9UU@W9WI-1, or call on UHF 443.675 pl2a (114.8hz) or 146.52 and I'll try to fill you in.

Thanks, Pat

P.S. Think big, get out a pencil and a map, draw lines on the map between major cities in Mich, WI, IOWA, MINN.... Don't forget the wormhole(s) to Milw and Upper MICH area which converge on Madison, next, place a GOLD star on North Freedom, WI. and draw a large circle around it that reaches Dubuque, Milwaukee, Stevens Point, Tomah, Madison, Green Lake, Janesville, Slinger, North Prairie and a host of other places.. Need I (dare I) say more?

HAPN Modem Review

The initial order for HAPN-T modems have arrived. The modems are in kit form and require about 2 hours to assemble. Instructions were adequate, but isn't up to the kit standard of other electronic kit manufacturers. All parts are grouped into one plastic bag. A single part diagram is excluded and the values of most parts are silk screened on the PC board. All in all you'll still have to do resistor color checking and a lot of searching on the layout to locate the part's proper spot. PC board quality is very good



RIVERLAN CONFERENCE 10/22/88

Lunch provides a good opportunity for informal discussion and getting questions answered

as well as the component quality.

The H.A.P.N.-T modem is intended to plug into a TAPR-2 / TAPR-1 clone to allow operation at 4800 baud. HAPN's choice of modulation technique and digital discriminator allow eliminating or at least bypassing some of the radio problem that face most packet networks. Audio to the transmitter is feed directly into the TX modulator, bypassing the audio stages which can distort the audio wave form. The receiver audio is obtained from the F.M. discriminator which eliminates RX audio distortion, long squelch opening delays, and audio level problems. Several adjustment tips are included, some of which even allow you to evaluate the receivers performance.

I felt some what uncomfortable with the TX audio level instructions though and suggest you set it at +/- 3.5 KHz, using a deviation meter. The instructions assume your radio was already set for proper operation at 1200 baud...

Incorporating the 4800 baud modems into the trunking systems should allow four (4) times the normal users via the nodes which will be maintained at present 1200 baud rate.

Bob - NK8T

Armenia Packet / Amtor Traffic

The International Amateur Radio Network is currently handling health and welfare packet traffic into Armenia via an AMTOR link that has been established in Cleveland, Ohio. Traffic to Armenia should be addressed to one of the following addresses:

KB1PJ @ NTSOH

KB1PJ @ WA8BXN

The two U.S. hams (W9ELR and KJ4TY) are deployed in the Soviet Union with complete base stations with AMTOR capabilities.

Use standard ARRL message format and include a callback telephone number so that when a response is received, the inquiring party may be contacted



RIVERLAN CONVERENCE 10/22/88

An opportunity for packet radio operators to get together to discuss the many facets of their inerests and to obtain answers to questions and concerns

via collect call (typically, this should not be the telephone number of an amateur). Be sure to include area code!

The title should have routing information "TO CLEVELAND, OHIO" to expedite routing.

For further information please contact IARN net control on 14.275.

TheBox BBS Software

To anyone interested, I have just received, hot off the boat, copies of NORD<>LINK's TheBox Packet BBS system and Turbo-Packet terminal program, including the source code for both. I'll be happy to make copies for anyone that sends an addressed disk mailer with sufficient postage, and 3 blank IBM formatted disks.

Eric J. Marang
3019 S. Hametown
Norton, OH 44203

NET/BUS - AN RS422 HIGH-SPEED NET/ROM BUS

Mike Tubby, G8TIC and GB7ERA, has developed an RS422 bus cable adaptor for connecting to TNCs. This allows a tnc with a modem-disconnect header to be connected to a bus/cable (two twisted pairs) instead of a radio. Named "NET/BUS", the main aim is to allow more than four ported network nodes ("TheNet" or "NET/ROM") to be built easily, as you can only go so far with a diode coupler/matrix.

Basically you take a "node" with, say, four ports, and make one of them talk RS422 instead of to a radio. You then repeat this on another node (in the same building) and connect the RS422 together; the nodes then form one big node with RS422 "channel" acting like a private radio link.

The main advantage of RS422 is that it can be multi-dropped, and so you can connect many four ported nodes together and make a "super-node." RS422 supports speeds of up to 10Mbps over short distances, so the tncs will run out of speed before you run out of bandwidth. "TheNet" appears happy at 19.2kbps, TXDELAY is quite okay set to zero, and you can also connect your "station tnc" and mailbox services to the "NET/BUS" via the same adapter board to give them high speed and efficient access to Level 3/4 of "TheNet" or "NET/ROM."

The design uses only three chips (two 75176 RS422 driver chips, and a 74HC00) and operates over two twisted pairs, one for data and one for channel access/DCD arbitration. The bus runs NRZI directly from the tnc and all devices are self-clocked; ie, there is no master clock on the bus. Simple CSMA arbitration is used, implementing PTT/DCD signal on one pair to provide the channel sharing.

Total cost of a NBA ("NET/BUS" Adapter) should be well under \$16 and can be built on a small piece of Veroboard. Mike used 5-pin 180 degree DIN

audio connectors .to make life easy (ready made connector leads are available from hi-fi shops). More details from Mike at 8 Waterford Close, Worcester WR3 7BL.

FROM RADIO COMMUNICATIONS, Radio Society Of Great Britain, December 1988 Copyright 1988 by RSGB - Reprinted by Permission

Free MS-DOS Contest Program

Fellow Contesters,

I have a contest program that I have written over the last 7 years developed for the upcoming 160 and 10 meter contests. I have shared the program with some local hams and they like it better than commercial programs. It is written under MS-Dos/BASICA. Its in color but will run OK Monochrome.

If you would like a copy please leave me a message at N4DBR @ KI4UN.

73 de Larry - N4DBR

Franz Josef Land Expedition

(This is one of the first packet messages originated from the Soviet Union.)

R:881123/2028- 96@RA3APR [Moscow]
From: RA3APR@RA3APR

UV3CC, Valery has plan to be active from Franz Josef Land from 25 dec 1988 till 31 march 1989. The call UV3CC/UA1P. SSB CW. Probably packet.
73 Leo, UA3CR

HAM RADIO - HALF TRUTHS

by Art Unwin, KB9MZ, SHORT C.I.R.C.uits
(via ARNS)

- If your rotor sticks or breaks, it will never be pointing in the right direction.

- Women will never understand what is beautiful with respect to antennas.

- When spring finally comes around and the snow melts, you will always find more PVC tape on the ground than on the tower. PVC tape always kills the grass if left alone.

- Always make sre the rotor connector wires are good and strong. They are difficult to get at when the tower is up. If you are NOT good at climbing, one will definitely come loose.

- The band is always in poor shape when you get home, but there is always someone around to tell you how good it was earlier.

- When you don't get that station through the pile-up, there is always somebody local who doesn't need him that got on the list. When you do get that station you want, the odds are more than 50/50 that a station will ask if the frequency is in use.

- You will never get back as many QSL cards as you sent out. Sooner or later you will suspect the Bureau of somehow losing your cards.

Yellow Thunder Amateur Radio Club



K90DK
WB9FDZ

Harry Westlund, K9EHJ,
Secretary
720 Lincoln Avenue
Baraboo, WI 53913

The next meeting of the Yellow Thunder Amateur Radio Club will be held on Monday, January 16, 1989, at 7:30 p.m., in room 288 of the Baraboo Civic Center, Baraboo, WI. (The complete schedule of meeting dates is in the Meetings column of this issue of BSSS.)

The December 15, 1988 meeting of the Yellow Thunder Amateur Radio Club was called to order at 7:40 p.m., by the President, Steve Schwoegler, WB9RNL.

The following members and guests were present:

Steve Schwoegler, WB9RNL	Wisconsin Dells
Jim Decker, WB9UQT	Baraboo
Harry Mayland, K9FFT	Baraboo
Art Kleefisch, W9WSS	Baraboo
Duane Grotophorst, KA9HKL	Loganville
Harry Westlund, K9EHJ	Baraboo
Phil Anderson, W9TP	Baraboo
Bill Klinkner	Sauk City
Anne Klinkner	Sauk City
Marvin E. Kaiser	

The Treasurers report was given showing an operating balance of \$184.47, with a total balance in all accounts of \$216.41.

The minutes of the last meeting were approved as published in the B.S.S.S.

The secretary had no communications to present.

Art Kleefisch, W9WSS, brought up the matter of our large portable Field Day generator. It seems the general attitude is that we should get rid of it. Operating costs & maintenance are getting to be too much.

It was reported that all six members of the Novice Class have finished the course with 100% attendance. All still have to do some brushing up before they can pass the test.

The President called for any more nominations for offices. There were no more nominations and nominations were closed. Therefore the parties previously nominated are elected for office by unanimous vote. The officers for 1989 are:

President, Duane Grotophorst, KA9HKL
Vice-Pres., Art Kleefisch, W9WSS
Secretary, Harry Westlund, K9EHJ
Treasurer, James Decker, WB9UQT

The Buck Night drawing was then held and was won by Duane Grotophorst, KA9HKL, the newly elected President. (Looks like a conflict of interest to me.) His prize was \$3.00.

With no further business, the meeting was adjourned at 8:38 p.m.

Respectfully submitted,
Harry Westlund, K9EHJ, Secretary

YTARC BIRTHDAZE

No January birthdays shown on the roster of YTARC members.

SENTENCE SERMON

God sees tomorrow more clearly than we see yesterday; let him lead.

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US Packet Statistics

Compiled by: Don Bennett (K4NGC)
15016 Carlsbad Road
Woodbridge, Va 22193
Landline BBS: 703-680-5970.

State	PBBS	DIGI	TOTAL	PERCENT
Alabama	17	24	41	1.55%
Alaska	7	17	24	0.91%
Arizona	34	23	57	2.15%
Arkansas	14	18	32	1.21%
California	130	99	229	8.65%
Colorado	37	70	107	4.04%
Connecticut	18	20	38	1.44%
Delaware	3	3	6	0.23%
Dist of Columbia	0	2	2	0.08%
Florida	67	94	161	6.08%
Georgia	30	25	55	2.08%
Hawaii	9	10	19	0.72%
Idaho	2	7	9	0.34%
Illinois	24	34	58	2.19%
Indiana	39	59	98	3.70%
Iowa	20	32	52	1.97%
Kansas	18	13	31	1.17%
Kentucky	16	41	57	2.15%
Louisiana	17	5	22	0.83%
Maine	8	9	17	0.64%
Maryland	47	51	98	3.70%
Massachusetts	36	30	66	2.49%
Michigan	30	17	47	1.78%
Minnesota	12	24	36	1.36%
Mississippi	12	6	18	0.68%
Missouri	18	43	61	2.31%
Montana	13	21	34	1.28%
Nebraska	11	19	30	1.13%
Nevada	1	14	15	0.57%
New Hampshire	15	14	29	1.10%
New Jersey	61	36	97	3.67%
New Mexico	17	17	34	1.28%
New York	81	71	152	5.74%
North Carolina	23	26	49	1.85%
North Dakota	7	5	12	0.45%
Ohio	53	59	112	4.23%
Oklahoma	14	27	41	1.55%
Oregon	8	9	17	0.64%
Pennsylvania	59	51	110	4.16%
Rhode Island	4	4	8	0.30%
South Carolina	13	14	27	1.02%
South Dakota	4	11	15	0.57%
Tennessee	20	18	38	1.44%
Texas	49	29	78	2.95%
Utah	9	32	41	1.55%
Vermont	8	7	15	0.57%
Virginia	44	63	107	4.04%
Washington	24	20	44	1.66%
West Virginia	6	12	18	0.68%
Wisconsin	27	25	52	1.97%
Wyoming	11	16	27	1.02%
Total	1249	1397	2646	100.00%

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MARCH 19, 1989

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